

ECPR Summer School in Methods and Techniques

Course Description Form

Course title

C2. Process Tracing Methodology

Instructor details

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Short Bio

Derek Beach is an Associate Professor at the University of Aarhus. His substantive research has focused upon EU integration, on which he has published one book, an edited volume, and numerous articles and chapters. He has co-authored a book on Process Tracing methodology that will be published in 2012 (University of Michigan Press), and has published several book chapters on Process Tracing.

Short outline

This course is an introduction to Process Tracing methodology, giving participants a set of practical methodological tools to utilise the method in their own research. The relative strength of Process Tracing methods is that they enable us to study causal mechanisms in single case studies. Causal mechanisms are theories that detail how an outcome is produced.

The course will first introduce the ontological and epistemological underpinnings of the method, followed by a practical introduction to topics such as how we should conceptualise causal mechanisms in a manner that can be studied empirically, gathering and evaluating evidence, and case selection strategies. The conclusions will debate the strengths and limitations of Process Tracing, showing when it can be used, when not, and how it can be combined with other methods.

The course requires active participation. Most benefit is to be expected if participants are able to use parts of their own research in the exercises during the course.

Long outline

This introductory course to Process Tracing aims to give the participant an understanding of the ontological and epistemological foundations of Process Tracing methods, but most importantly, the aim is to enable the participant to utilize Process Tracing methods in their own research by providing a set of practical research tools.

In comparison to other research methods such as large-N correlation-based analysis and comparative methods, process-tracing as a distinct method involves research where, 'The cause-effect link that connects independent variable and outcome is unwrapped and divided into smaller steps; then the investigator looks for observable evidence of each step.' (Van Evera 1997:64).

The promise of process-tracing as a methodological tool is that it enables the researcher to study more-or-less directly the *causal mechanism(s)* linking an independent variable (or set of variables) and an outcome, allowing us to open up the 'black box' of causality itself. A classic example from medical science is scholarship on the association between smoking and cancer. While a strong empirical correlation had been well established for many years, it was only recently that medical scientists using techniques analogous to Process Tracing have provided strong proof that a biological mechanism actually exists that causally links smoking and cancer (Bunge 1997). Within political science methodology, Process Tracing is arguably the only method that allows us to study causal mechanisms, allowing us to understand *how* an X (or set of X's) produces Y instead of simply studying correlations and associations, and therefore is an '...invaluable method that should be included in every researcher's repertoire.' (George and Bennett 2005:224).

The course starts by differentiating Process Tracing from other methods; including both large-n quantitative, frequentist methods, but also other small-n methods such as analytical narratives, comparative case studies etc. Here we define Process Tracing by the interest in studying causal mechanisms in single case studies. We discuss the three overall variants of Process Tracing: theory-testing, theory-building, and explaining outcome PT.

This is followed by a session that discusses the ontological and epistemological debates about the nature of causal mechanisms. Topics include how we should understand causal mechanisms (as intervening variables or systems) in Process Tracing research, and whether we can directly observe causal mechanisms. Participants will be asked to discuss the understanding of causality that they adopt in their own research.

Day 2 starts with a session that introduces the Bayesian logic of inference that underpins Process Tracing, contrasting it with both the frequentist/statistical and comparative logics of inference. Drawing on day 1, we will also discuss the broader logic of single case research designs, and what types of inferences can be drawn based upon them. The workshop then turns to the more practical, how-to aspects of Process Tracing, where we will work on translating an abstract theorized causal mechanism into a set of observable implications that can be empirically assessed. The second session of Day 2 deals with the theoretical conceptualisation phase, where a theory is developed into a theorized causal mechanism that can explain how X produces Y. Participants will be asked to translate a theory from their own research into a theorised causal mechanism.

Day 3 discusses how to operationalised causal mechanisms, in other words, how causal mechanisms can be studied empirically. Themes that will be introduced include techniques for assessing the strength of the test of the presence/absence of a particular part of a mechanism, and logics of confirmation and falsification. Participants will be asked to develop ‘tests’ of the observable implications of the existence of theorized causal mechanism from their own research. The second session discusses challenges of gathering and working with different types of evidence in Process Tracing scholarship. We focus upon archival material, elite interviews, and secondary historical sources. This includes questions such as how should we evaluate bias, what is a ‘good’ source, and how we deal with bias in secondary historical work.

The first session of Day 4 turns to questions of case selection, and in particular how the strategies differ from broader case selection research strategies in qualitative methodology. Participants will be asked to discuss the cases they select in their own research, and why these cases have been chosen. The second session of Day 4 will involve a workshop where you attempt to apply the guidelines for PT for the different steps of the research process on your own PhD project.

Day 5 first details the debate about how we can engage in mixed-method research, and in particular how we can combine the insights gained from a Process Tracing case study with research undertaken using other methods. The final session will bring together the key themes, discussing the strengths and weaknesses of Process Tracing. In what research situations can Process Tracing methods be fruitfully employed? When it is inappropriate to use Process Tracing? How can Process Tracing studies be combined in mixed-methods research designs?

The readings for the course include a forthcoming book authored by Beach and Pedersen, along with central articles and chapters. It is expected that participants bring draft material from their own research, including a theory that can be translated into a causal mechanism, along with reflections upon their case selection strategy (which cases are to be selected?).

Day-to-day schedule

- Week 1

	Topic(s)	Details [NB : incl. timing of lecture v/s lab or fieldwork etc. hours]
Day 1	Monday Mix (90 min general introduction to the topic) Introduction to Process Tracing (what it is and what it is not) What are causal mechanisms? (2 nd morning session)	
Day 2	Causal inference and Process Tracing (1 st morning session) Working with theories (2 nd morning session)	
Day 3	Developing empirical tests (1 st morning session) Gathering and working with evidence (2 nd morning session)	
Day 4	Case selection and Process Tracing (1 st morning session) Process Tracing project (developing a research design)	
Day 5	Combining Process Tracing with other methods (1 st morning)	

	Using Process Tracing methods in practice (2 nd morning)	
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Day-to-day reading list

- Week 1

Readings (please read at least the compulsory reading for the scheduled day)	
Day 1	<p><u>Monday Morning „Mix“ (introduction)</u></p> <ul style="list-style-type: none"> • King, Keohane and Verba (1994) <i>Designing Social Inquiry: Scientific Inference in Qualitative Research</i>. Princeton: Princeton University Press, pp. 208-230. • Bennett (2008) 'Process-Tracing: A Bayesian Perspective.', in Janet M. Box-Steffensmeier, Henry E. Brady and David Collier (eds.) <i>The Oxford Handbook of Political Methodology</i>. Oxford: Oxford University Press, pp. 702-721. • Beach and Pedersen (forthcoming) <i>Process Tracing: An Introduction</i>. Ann Arbor: University of Michigan Press. Chapters 1 and 2. • Blatter and Blume (2008) 'In Search of Co-variance, Causal Mechanisms or Congruence? Towards a Plural Understanding of Case Studies.', <i>Swiss Political Science Review</i>, 14(2): 315-356. <p><u>2nd Morning (causal mechanisms)</u></p> <ul style="list-style-type: none"> • Beach and Pedersen (forthcoming) <i>Process Tracing: An Introduction</i>. Ann Arbor: University of Michigan Press. Chapter 3. • Gerring (2010) 'Causal Mechanisms: Yes, But...', <i>Comparative Political Studies</i>, 43(11): 1499-1526. • Hedström and Ylikoski (2010) 'Causal Mechanisms in the Social Sciences.', <i>Annual Review of Sociology</i>, 36: 49-67.
Day 2	<p><u>1st Morning (causal inference)</u></p> <ul style="list-style-type: none"> • King, Keohane and Verba (1994) <i>Designing Social Inquiry: Scientific Inference in Qualitative Research</i>. Princeton: Princeton University Press, pp. 75-99. • Beach and Pedersen (forthcoming) <i>Process Tracing: An Introduction</i>. Ann Arbor: University of Michigan Press. Chapter 5. • Howson and Urbach (2006) <i>Scientific Reasoning: the Bayesian Approach</i>. Third Edition. La Salle, Il: Open Court. Chapter 4. <p><u>2nd Morning (working with theories)</u></p> <ul style="list-style-type: none"> • Adcock and Collier (2001) 'Measurement Validity: A Shared Standard for Qualitative and Quantitative Research.', <i>American Political Science Review</i>, Vol. 95, No. 3, pp. 529-546. • Beach and Pedersen (forthcoming) <i>Process Tracing: An Introduction</i>. Ann Arbor: University of Michigan Press. Chapter 4. • Owen (1994) 'How Liberalism Produces Democratic Peace.', <i>International Security</i>, Vol. 19, No. 2 (Fall 1994) pp. 87-125).
Day 3	<p><u>1st Morning (empirical tests)</u></p> <ul style="list-style-type: none"> • Beach and Pedersen (forthcoming) <i>Process Tracing: An Introduction</i>. Ann Arbor: University of Michigan Press. Chapter 6. • Tannenwald (1999) 'The Nuclear Taboo: The United States and the Normative Basis of Nuclear Non-Use', <i>International Organization</i>, 53(3): 433-468. <p><u>2nd Morning (gathering and working with evidence)</u></p> <ul style="list-style-type: none"> • Beach and Pedersen (forthcoming) <i>Process Tracing: An Introduction</i>. Ann Arbor: University of Michigan Press. Chapter 7. • Lustick (1996) 'History, Historiography and Political Science.', <i>APSR</i>, 90(3), pp. 605-618. • Trachtenberg (2006) <i>The Craft of International History</i>. Princeton: Princeton University Press. Chapter 5. • Tonsey (2007) 'Process Tracing and Elite Interviewing: A Case for Non-probability Sampling.', <i>PS</i>, 40(4): 765-772.

Day 4	<p><u>1st Morning (case selection)</u></p> <ul style="list-style-type: none"> • Gerring (2007) <i>Case Study Research</i>. Cambridge: Cambridge University Press, pp. 86-150. • Lieberman (2005) 'Nested Analysis as a Mixed-Method Strategy for Comparative Research.', <i>American Political Science Review</i>, Vol. 99, No. 3, pp. 435-451. • Beach and Pedersen (forthcoming) <i>Process Tracing: An Introduction</i>. Ann Arbor: University of Michigan Press. Chapter 8. <p><u>2nd Morning (work on research project) – no readings</u></p>
Day 5	<p><u>1st Morning (combining methods)</u></p> <ul style="list-style-type: none"> • Rohlfing, Ingo (2008) 'What You See and What You Get: Pitfalls and Principles of Nested Analysis in Comparative Research.', <i>Comparative Political Studies</i>, 41(11): 1492-1514. • Khong (1992) <i>Analogies at War</i>. Princeton: Princeton University Press, pp. 47-68, 97-147 (skim the later selection). <p><u>2nd Morning (using PT in practice) – no readings</u></p>

Requested prior knowledge

Some background knowledge of qualitative case study methods will be helpful, in particular the debate between scholars who argue that there is only one logic of scientific inquiry (e.g. King, Keohane and Verba, 1994) and qualitative scholars who contend that there are important differences between quantitative and qualitative methods (e.g. George and Bennett, 2005; Brady and Collier, 2010; Mahoney, 2008). If you are unfamiliar with these debates, I would suggest skimming the chapters in the Brady and Collier edited volume (in particular chapters 1, 2, 9).

Software used

None

Literature

Beyond the above course literature, the following are cited above.

Brady, Henry E. & David Collier (eds.) (2010) *Rethinking Social Inquiry: Diverse Tools, Shared Standards*. Second Edition. Lanham, MD: Rowman Littlefield.

George, Alexander L. & Bennett, Andrew (2005) *Case studies and Theory Development in the Social Sciences* Cambridge, Massachusetts, London: MIT Press.

Mahoney, James (2008) 'Toward a Unified Theory of Causality.', *Comparative Political Studies*, Vol. 41, No. 4/5, pp. 412-436.

Lecture room requirement

A seminar room that is conducive to extensive discussions with participants is preferred over a traditional lecture room. A blackboard or whiteboard along with Powerpoint is mandatory.